No. 200800006

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

University of Georgia Research Foundation, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT, COMMON

'AGS 2031'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of Washington, D.C. this fifteenth day of April, in the year two thousand and eight.*

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

REPRODUCE LOCALLY. *Include form number and date on all reproductions* — Form Approved - OMB No. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER: University of Georgia Research Foundation, Inc.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME: GA951395-3A31

3. VARIETY NAME: AGS 2031

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*: 627 Boyd Graduate Studies Research Center
Athens, GA 30602-7411

5. TELEPHONE *(include area code)*: (706) 542-1404

6. FAX *(include area code)*: (706) 542-3837

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PVPO NUMBER: #200800006

FILING DATE: October 16, 2007

7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.)*: Corporation

8. IF INCORPORATED, GIVE STATE OF INCORPORATION: Georgia

9. DATE OF INCORPORATION: November 17, 1978

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. *(First person listed will receive all papers)*
Sohail Malik
Alisa Harkins
University of Georgia Research Foundation, Inc.
627 Boyd Graduate Studies Research Center
Athens, GA 30602-7411

FEES RECEIVED
FILING AND EXAMINATION FEES: $4382.00
DATE 10/16/2007
CERTIFICATION FEE: $ 768.00
DATE 2/27/08

11. TELEPHONE (Include area code): (706) 542-1404

12. FAX (Include area code): (706) 542-3837

13. E-MAIL: agh@uga.edu

14. CROP KIND *(Common Name)*: Wheat (common)

16. FAMILY NAME *(Botanical)*: Triticum aestivum

15. GENUS AND SPECIES NAME OF CROP: Gramineae

17. IS THE VARIETY A FIRST GENERATION HYBRID? ☐ YES ☒ NO

18. DOES THE VARIETY CONTAIN ANY TRANSGENES? ***(OPTIONAL)*** ☐ YES ☒ NO

IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERICALIZATION. _____

19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)

a. ☒ Exhibit A. Origin and Breeding History of the Variety
b. ☒ Exhibit B. Statement of Distinctness
c. ☒ Exhibit C. Objective Description of Variety
d. ☒ Exhibit D. Additional Description of the Variety *(Optional)*
e. ☒ Exhibit E. Statement of the Basis of the Owner's Ownership
f. ☒ Exhibit F. Declaration Regarding Deposit
g. ☐ Voucher Sample *(3,000 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository)*
h. ☒ Filing and Examination Fee ($4,382), made payable to "Treasurer of the United States" *(Mail to the Plant Variety Protection Office)*

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD ONLY AS A CLASS OF CERTIFIED SEED? *(See Section 83(a) of the Plant Variety Protection Act)*

☐ YES *(If "yes", answer items 21 and 22 below)*
☒ NO *(If "no", go to item 23)*
☐ UNDECIDED

21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES?

☐ YES ☐ NO

IF YES, WHICH CLASSES? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?

☐ YES ☐ NO

IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS.

☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

(If additional explanation is necessary, please use the space indicated on the reverse.)

23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES?

☐ YES ☒ NO

IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. *(Please use space indicated on reverse.)*

24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT *(PLANT BREEDER'S RIGHT OR PATENT)*?

☐ YES ☒ NO

IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. *(Please use space indicated on reverse.)*

25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER		SIGNATURE OF OWNER	
NAME *(Please print or type)* Sohail Malik		NAME *(Please print or type)*	
CAPACITY OR TITLE: Chief Licensing Officer	DATE: 11 OCT 2007	CAPACITY OR TITLE	DATE

ST-470 (02-06) designed by the Plant Variety Protection Office using Word 2003.

(See reverse for instructions and information collection burden statement)

20080060 6

GENERAL INSTRUCTIONS: To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be **received** in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E, F; (3) for a tuber reproduced variety, verification that a viable *(in the sense that it will reproduce an entire plant)* tissue culture will be deposited and maintained in an approved public repository; and (4) payment by credit card or check drawn on a U.S. bank for $4,382 ($518 filing fee and $3,864 examination fee), payable to "Treasurer of the United States" *(See Section 97.6 of the Regulations and Rules of Practice).* **NEW:** With the application for a seed reproduced variety **or by direct deposit soon after filing**, the applicant must provide at least 3,000 viable untreated seeds of the variety *per se*, and for a hybrid variety at least 3,000 untreated seeds of each line necessary to **reproduce** the variety. Partial applications will be held in the PVPO for not more than 90 days; then returned to the applicant as un-filed. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a payment by credit card or check payable to "Treasurer of the United States" in the amount of $768 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. *(See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)*

Plant Variety Protection Office
Telephone: (301) 504-5518 **FAX:** (301) 504-5291
General E-mail: PVPOmail@usda.gov
Homepage: http://www.ams.usda.gov/science/pvpo/PVPindex.htm

SPECIFIC INSTRUCTIONS:
To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and **provide evidence** that the permanent name of the application variety (even if it is a parental, inbred line) has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: U.S. Department of Agriculture, Agricultural Marketing Service, Livestock and Seed Programs, **Seed Regulatory and Testing Branch**, 801 Summit Crossing Place, Suite C, Gastonia, North Carolina 28054-2193 Telephone: (704) 810-8870. http://www.ams.usda.gov/lsg/seed.htm.

ITEM

19a. Give:
(1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified

19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:

(1) identify these varieties and state all differences objectively;
(2) attach replicated statistical data for characters expressed numerically and demonstrate that these are clear differences; and
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.

19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.

19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, *etc.*

19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.

20. If "Yes" is specified *(seed of this variety be sold by variety name only, as a class of certified seed)*, the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. *(See Regulations and Rules of Practice, Section 97.103).*

23. *See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.*

24. *See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.*

22. CONTINUED FROM FRONT *(Please provide a statement as to the limitation and sequence of generations that may be certified.)*

N/a

23. CONTINUED FROM FRONT *(Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)*

N/a

24. CONTINUED FROM FRONT *(Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)*

N/a

Exhibit A

Origin and Breeding History of 951395-3A31

951395-3A31 winter wheat (Triticum aestivum L.), was developed and released by the Georgia Agricultural Experiment Stations in 2006. 951395-3A31 was derived from the cross, GA 87110 / VA93-52-55// GA 88151. The pedigree of GA 87110 is GA-Andy / GA-Gore; VA 93-52-55 is MASSEY*3/BALKAN//SALUDA; and GA 88151 is Hunter // FengKang 7 / GA-Gore.

The cross of 951395-3A31 was made in the spring of 1995. The F1 was grown during the spring of 1996. The population was advanced from the F2 through F5 generations using the pedigree method of breeding with individual spikes selected for resistance to leaf rust (caused by *Puccinia recondita* (Roberge ex Desmaz), stripe rust (caused by *Puccinia striiformis* Westend), powdery mildew (caused by *Erysiphe graminis* DC. f. sp. *tritici* Em. Marchal), and septoria nodorum blotch (caused by Stagonospora nodorum (Berk) Castellani & E.G. Germano). Spikes were harvested, threshed individually and planted in single 1 meter headrows and were advanced to the next generation during the F2:3-, F3:4-, and F4:5-derived lines at Plains, GA. 951395-3A31 is the F5:derived head row selected and advanced to Breeder Seed which was produced in the F10 generation.

951395-3A31 was evaluated as GA951395-3A31 for agronomic performance in nursery plots in 2002 and 2003, GA state trials at five locations from 2004 to 2005, and in the Uniform Southern Soft Red Winter Wheat Nursery at about 30 locations in 2005.

An increase strip of 951395-3A31 was planted in 2004 from a small increase plot and was rogued thoroughly for aberrant types. Seeds from this increase strip was planted in an increase block (2 acres) of 951395-3A31 in 2005 at the Foundation Seed Farm and rogued to remove variants. Seed from this large block was used for Breeder Seed for 951395-3A31 in 2006. 951395-3A31 has been observed for 3 generations of reproduction and during seed increase period and is stable and uniform. The variant consists of 1 bearded head per 10,000 heads, 1 early taller head per 5,000 heads, 1 bronze head per 10,000 heads, and 1 blue head per 10,000 heads.

This Breeder seed of 951395-3A31 was provided to the Georgia Seed Development Commission and will be the source of future seed multiplications. Breeder seed of 951395-3A31 will be maintained by the Georgia Agricultural Experiment Station, University of Georgia-Griffin Campus, Griffin, GA 30223-1797.

Exhibit B 200800006

Novelty Statement

951395-3A31 is a soft red winter wheat, apically awnletted, and white chaffed. 951395-3A31 is most similar in appearance to 'AGS 2010'; however, 951395-3A31 is brown-black in phenol test whereas AGS 2010 is fawn. 951395-3A31 is also similar in appearance to 'USG 3295' (951395-3E25); however, 951395-3A31 is green in leaf color whereas USG 3295 (951395-3E25) is blue-green in leaf color.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

Exhibit C

OBJECTIVE DESCRIPTION OF VARIETY
Wheat (*Triticum* spp.)

NAME OF APPLICANT (S)	TEMPORARY OR EXPERIMENTAL DESIGNATION	VARIETY NAME
University of Georgia Research Foundation, Inc.	GA951395-3A31	AGS 2031

ADDRESS *(Street and No. or RD No., City, State, Zip Code and Country)*
627 Boyd Graduate Studies Research Foundation, Inc.
Athens, GA 30602-7411

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PVPO NUMBER
#200800006

PLEASE READ ALL INSTRUCTIONS CAREFULLY:

Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in the first box (e.g., [0][9][9] or [0][9]) when number is either 99 or less or 9 or less respectively. Data for quantitative plant characters should be based on a minimum of 100 plants. Comparative data should be determined from varieties entered in the same trial. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: _____. Please answer all questions for your variety; lack of response may delay progress of your application.

1. KIND:

[1]
1 = Common
2 = Durum
3 = Club
4 = Other (Specify) _____

2. VERNALIZATION:

[2]
1 = Spring
2 = Winter
3 = Other (Specify) _____

3. COLEOPTILE ANTHOCYANIN:

[1] 1 = Absent 2 = Present

4. JUVENILE PLANT GROWTH:

[3] 1 = Prostrate 2 = Semi-Erect 3 = Erect

5. PLANT COLOR: (boot stage)

[2]
1 = Yellow-Green
2 = Green
3 = Blue-Green

6. FLAG LEAF: (boot stage)

[1] 1 = Erect 2 = Recurved
[1] 1 = Not Twisted 2 = Twisted
[1] 1 = Wax Absent 2 = Wax Present

7. EAR EMERGENCE:

[1][2][0] Number of Days (Average)
[ ][ ] Number of Days Earlier Than * _____
Same As * _____
[0][2] Number of Days Later Than * AGS 2000

**Relative to a PVPO-Approved Commercial Variety Grown in the Same Trial*

8. ANTHER COLOR:

[1] 1 = Yellow 2 = Purple

9. PLANT HEIGHT: (from soil to top of head, excluding awns)

[0][8][5] cm (Average)

[ ][ ] cm Taller Than _____ *

Same As _____ *

[0][8] cm Shorter Than AGS 2000 *

10. STEM:

A. ANTHOCYANIN

[1] 1 = Absent 2 = Present

B. WAXY BLOOM

[1] 1 = Absent 2 = Present

C. HAIRINESS (last internode of rachis)

[1] 1 = Absent 2 = Present

D. INTERNODE

[1] 1 = Hollow 2 = Semi-Solid 3 = Solid

[4] Number of Nodes

E. PEDUNCLE

[1] 1 = Erect 2 = Recurved 3 = Semi-Erect

[3][1] cm Length

F. AURICLE

[1] Anthocyanin: 1 = Absent 2 = Present

[1] Hair: 1 = Absent 2 = Present

11. HEAD: (At Maturity)

A. DENSITY

[2] 1 = Lax
2 = Middense (Laxidense)
3 = Dense

B. SHAPE

[2] 1 = Tapering
2 = Strap
3 = Clavate
4 = Other (Specify) _____

C. CURVATURE

[1] 1 = Erect
2 = Inclined
3 = Recurved

D. AWNEDNESS

[3] 1 = Awnless
2 = Apically Awnletted
3 = Awnletted
4 = Awned

12. GLUMES: (At Maturity)

A. COLOR

[1] 1 = White
2 = Tan
3 = Other (Specify) _____

B. SHOULDER

[3] 1 = Wanting 2 = Oblique
3 = Rounded 4 = Square
5 = Elevated 6 = Apiculate
7 = Other (Specify) _____

C. SHOULDER WIDTH

[2] 1 = Narrow
2 = Medium
3 = Wide

D. BEAK

[2] 1 = Obtuse
2 = Acute
3 = Acuminate

E. BEAK WIDTH

[2] 1 = Narrow
2 = Medium
3 = Wide

F. GLUME LENGTH

[2] 1 = Short (ca. 7 mm)
2 = Medium (ca. 8 mm)
3 = Long (ca. 9 mm)

G. WIDTH

[2] 1 = Narrow (ca. 3 mm)
2 = Medium (ca. 3.5 mm)
3 = Wide (ca. 4 mm)

H. PUBESCENCE

[1] 1 = Not Present
2 = Present

200800006

13. SEED:

A. SHAPE

[1] 1 = Ovate
2 = Oval
3 = Elliptical

B. CHEEK

[1] 1 = Rounded
2 = Angular

C. BRUSH

[2] 1 = Short
2 = Medium
3 = Long

[1] 1 = Not Collared
2 = Collared

D. CREASE

[1] 1 = Width 60% or less of Kernel
2 = Width 80% or less of Kernel
3 = Width Nearly as Wide as Kernel

[2] 1 = Depth 20% or less of Kernel
2 = Depth 35% or less of Kernel
3 = Depth 50% or less of Kernel

E. COLOR

[3] 1 = White
2 = Amber
3 = Red
4 = Other (Specify) _____

F. TEXTURE

[2] 1 = Hard
2 = Soft
3 = Other (Specify) _____

G. PHENOL REACTION (See Instructions)

[4] 1 = Ivory
2 = Fawn
3 = Light Brown
4 = Dark Brown
5 = Black

H. SEED WEIGHT

[3][8] g/1000 Seed (whole number only)

I. GERM SIZE

[1] 1 = Small
2 = Midsize
3 = Large

14. DISEASE: PLEASE INDICATE THE SPECIFIC RACE OR STRAIN TESTED

(0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant)

- [ ] Stem Rust (*Puccinia graminis* f. sp. *tritici*)
- [2] Stripe Rust (*Puccinia striiformis*)
- [ ] Tan Spot (*Pyrenophora tritici-repentis*)
- [ ] Halo Spot (*Selenophoma donacis*)
- [ ] *Septoria nodorum* (Glume Blotch)
- [ ] *Septoria avenae* (Speckled Leaf Disease)
- [ ] *Septoria tritici* (Speckled Leaf Blotch)
- [ ] Scab (*Fusarium* spp.)
- [ ] "Black Point" (Kernel Smudge)
- [ ] Barley Yellow Dwarf Virus (BYDV)
- [2] Soilborne Mosaic Virus (SBMV)
- [ ] Wheat Yellow (Spindle Streak) Mosaic Virus
- [ ] Wheat Streak Mosaic Virus (WSMV)
- [ ] Other (Specify) _____
- [ ] Other (Specify) _____
- [ ] Other (Specify) _____

- [2] Leaf Rust (*Puccinia recondita* f. sp. *tritici*) BBB D, NBBK, SBDD, MCRK, MLDS, MCDS, TBBF, TLGK, TNRJ, THBJ
- [ ] Loose Smut (*Ustilago tritici*)
- [ ] Flag Smut (*Urocystis agropyri*)
- [ ] Common Bunt (*Tilletia tritici* or T. *laevis*)
- [ ] Dwarf Bunt (*Tilletia controversa*)
- [ ] Karnal Bunt (*Tilletia indica*)
- [2] Powdery Mildew (*Erysiphe graminis* f. sp. *tritici*)
- [ ] "Snow Molds"
- [ ] Common Root Rot (*Fusarium*, *Cochliobolus* and *Bipolaris* spp.)
- [ ] Rhizoctonia Root Rot (*Rhizoctonia solani*)
- [ ] Black Chaff (*Xanthomonas campestris* pv. *translucens*).
- [ ] Bacterial Leaf Blight (*Pseudomonas syringae* pv. *syringae*)
- [ ] Other (Specify) _____
- [ ] Other (Specify) _____
- [ ] Other (Specify) _____
- [ ] Other (Specify) _____

15. INSECT: (0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant)

PLEASE SPECIFY BIOTYPE (where needed)

- [1] Hessian Fly (*Mayetiola destructor*) B, E, L, D
- [ ] Stem Sawfly (*Cephus* spp.)
- [ ] Cereal Leaf Beetle (*Oulema melanopa*)
- [ ] Other (Specify) _____
- [ ] Other (Specify) _____
- [ ] Other (Specify) _____

15. INSECT: (continued) (0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant)

PLEASE SPECIFY BIOTYPE (Where Needed)

- ☐ Russian Aphid (*Diuraphis noxia*)
- ☐ Greenbug (*Schizaphis graminum*)
- ☐ Aphids
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____

16. ADDITIONAL INFORMATION ON ANY ITEM ABOVE, OR GENERAL COMMENTS:

Exhibit D

Additional Description of 951395-3A31

951395-3A31 is a common soft red winter wheat, *Triticum aestivum* L. bred and developed by the University of Georgia, Georgia Agricultural Experiment Stations and developed by Jerry W. Johnson. 951395-3A31 is a medium maturing, high yielding, excellent test weight, apically awnletted wheat with resistance to current races of leaf rust, Puccinia recondita (Roberge ex Desmaz), and stripe rust, Puccinia striiformis Westend, resistant to powdery mildew, (Erysiphe graminis DC. f. sp. tritici Em. Marchal) and susceptible to biotypes (B, D, E, L) of Hessian flies, (Mayetiola destructor (Say). 951395-3E25 is resistant to leaf rust races, BBBD, NBBK, SBDD, MCRK, MLDS, MCDS, TBBF, TLGK, TNRJ, and THBJ.

Milling and baking quality characteristics of 951395-3A31 are rated as acceptable for soft red winter wheat use by the USDA-Soft Wheat Quality 1aboratory, Wooster, OH. Information on the milling and baking quality characteristics is also included in a quality report. Additional information is presented in attachment to the Exhibit.

ATTACHMENT I

APPLICATION FOR APPROVAL OF__ CULTIVARS _X_ ASSOCIATE CULTIVARS

(Please check appropriate type of application)

1. Crop: Wheat

2. Experimental no. or name: GA 951395-3A31

3. Pedigree and history: GA 951395-3A31 is GA 87110 / VA93-52-55// GA 88151. The final cross was made in the spring of 1995. Individual spike selections were made in the F2 to F5 generations at Plains, GA. The pedigree method of breeding was used to advance the segregating populations. In 2001, a headrow was harvested for preliminary evaluations. Agronomic evaluations were conducted from 2004 to 2005 in the Small Grain State Performance Trials for Georgia. It was evaluated in 2005 in the Uniform Southern Wheat Nursery.

4. Description: GA 951395-3A31 is an early-medium maturing, white chaffed, short height line. Its maturity is similar to AGS 2000 with an average of 1.5 days later in Georgia. It is susceptible to current biotypes of Hessian fly in Georgia and is resistant to races of leaf rust and stripe rust in Georgia.

5. Station(s) where developed: Griffin Campus

6. Participating scientist(s): Jerry Johnson and G. David Buntin

7. In what respect is the new cultivar superior to the cultivar now in use? or reasons for proposing release as an associate cultivar.

GA 951395-3A31 will be released as an Associate Cultivar due to its susceptibility to Hessian fly (Table 8) and its good performance in the Uniform Southern Trial.

GA 951395-3A31 is a high-yielding, medium maturing, and good test weight soft red winter wheat line (Tables 1, 2, 4, 5, and 6). It is resistance to leaf rust and stripe rust (Tables 3 and 7).

It is equal to AGS 2000 in grain yield and test weight in Georgia (Tables 1, 2, and 4).

It has better stripe rust and soil-borne virus resistance than AGS 2000 (Tables 3 and 7)

In the Uniform Southern Trial during 2005, it ranked number 5 out of 41 entries for grain yield over 21 locations and yielded better than the two checks (AGS 2000 and PIO 26R61) (Table 6).

8. Method of propagation: Seed

9. Amount of breeder seed stocks available (if applicable): 20 bu.

10. Amount of foundation seed stocks available (if applicable): 1000 bushel in summer of 2006.

11. Amount of cutting or bud material available for vegetative propagated material for nursery distribution (if applicable):

12. Is there likely to be unusual difficulty encountered in the production of any class of seed stocks? Explain. No

13. Three suggested names for the cultivar: GA 951395-3A31

14. Name approved by plant cultivar and germplasm release committee: GA 951395-3A31

15. Form of intellectual property protection: Plant Variety Protection

16. Is a royalty assessment recommended: X Yes __ No

#20080006

GA 951395-3A31

RECOMMENDED BY:

A. _____
Originating Scientist

B. _____
Department Head

C. _____
Assistant Dean

D. _____
Chairperson, GAES Plant Cultivar and Germplasm Release Committee

E. _____
Associate Dean for Research

APPROVED:

_____
Dean and Director
College of Agricultural & Environmental Sciences

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Table 1. Average Performance of GA 951395-3A31 and Checks in Elite Nursery Multilocations*, 2003.

Entry	Yield bu/A	Test Wt. lbs/bu	Head Date Julian	Height inches
GA 951395-3A31	68a	59a	100a	35b
AGS 2000	65ab	54b	100a	36ab
PIO 26R61	58b	59a	99a	38a

* Plains, Griffin, Marianna and Quincy, FL, and Belle Mina, AL

Table 2. Average Performance of GA 951395-3A31 and Checks in Multi-State* Performance Trials (GAWN), 2004.

Entry	Yield bu/A	Test Wt. lbs/bu	Head Date Julian	Height inches
GA 951395-3A31	72a	58a	103b	31b
AGS 2000	69a	57a	101b	34a
McCormick	72a	58b	105a	31b

*Florida, Georgia, Arkansas, Louisiana, Virginia

Table 3. Average Agronomic Traits of GA 951395-3A31 and Checks in Multi-State* Performance Trials (GAWN), 2004.

Entry	Lodging 0-9	P. Mildew 0-9	Leaf Rust 0-9	Stripe Rust 0-9
GA 951395-3A31	0.2a	4.0a	0.2a	1.0b
AGS 2000	1.4a	4.0a	0.3a	3.0a
McCormick	0.9a	3.0a	0.4a	1.1b

*Florida, Georgia, Arkansas, Louisiana, Virginia

Table 4. Average Performance of GA 951395-3A31 and Checks in Georgia's State Performance Trials in Georgia, 2-Yr Ave, 2004-2005.

Entry	Yield bu/A	Test Wt. lbs/bu	Head Date Julian	Height inches
GA 951395-3A31	95.7a	58a	95a	37b
AGS 2000	97.5a	59a	93a	40a
PIO 26R61	88.9b	59a	95a	41a

Table 5. Average Performance of GA 951395-3A31 and Checks in State Elite Nursery at 3 locations in Georgia, 2-Yr Ave, 2004-2005.

Entry	Yield bu/A	Test Wt. lbs/bu	Head Date Julian	Height inches
GA 951395-3A31	91.8a	58a	93a	31c
AGS 2000	87.5a	58a	93a	34b
PIO 26R61	88.9a	59a	91a	38a

Plains, Griffin, Calhoun

Table 6. Average Performance of GA 951395-3A31 and Checks in Georgia's State Performance Trials in Georgia, 2-Yr Ave, 2005-2006.

Entry	Yield bu/A	Test Wt. lbs/bu	Head Date Julian	Height inches
GA 951395-3A31	87.2a	61a	93a	36b
AGS 2000	84.4a	60a	92a	39a
PIO 26R61	80.0b	61a	93a	40a

Table 7. Average Performance of GA 951395-3A31 and Checks in Uniform Southern Soft Red Winter Nursery, 2005.

Entry	Yield bu/A	Test Wt. lbs/bu	Head Date Julian	Height inches
GA 951395-3A31	82.7a	59ab	120a	34b
AGS 2000	71.0b	58b	119b	37a
PIO 26R61	75.6b	60a	120ab	37a

21 locations in the Southern Region

Table 8. Average Agronomic Traits of GA 951395-3A31 and Checks in Uniform Southern Soft Red Winter Nursery, 2005.

Entry	Soil-Borne Virus 0-9	Leaf Rust 0-9	Stripe Rust 0-9	P. Mildew 0-9
GA 951395-3A31	0b	0.1a	0.7b	1.2a
AGS 2000	7a	1.0a	3.9a	0.5a
PIO 26R61	0b	1.4a	0.7b	1.6a

21 locations in the Southern Region

Table 8. Evaluation of lines to biotypes of Hessian Fly, USDA-ARS Lab, Purdue University, 2005.

Entry	Biotype B R:S	Biotype D R:S	Biotype E R:S	Biotype L R:S	Field Rating* %
GA 951395-3A31	0-20	0-14	0-15	0-17	45a
AGS 2000	1-14	0-16	2-13	0-18	20a
PIO 26R61	0-14	0-14	12-0	0-14	0b

*Plains, GA

LEAF RUST

St. Paul
MN
Long

		Reactions produced by NA race* **										Postulated
		BBBD	NBBK	SBDD	THBJ	MCRK	MLDS	TBBF	TLGK	TNRJ	MCDS	Genes***
1	AGS 2000	;	;	;	3	3	-	;	;	;	;1C	10,26,+
2	USG 3209	;	;	;	;	3	;	;	;	;1c	;1C	11,26
3	Pioneer 26R61	;	;	;	;1c2	;	;	;1c	;	;1c	;1C2	+
4	McCormick	;	;	;	;	;	;	;	;	3	;	24
5	TN04-01	;	;	;	;1c2	;	;	;	;	;	;	+
6	NC00-15332	;	;	;	;	;	;	;	;1c2	3-,	;	24,+
7	MV 5-46	;	;	;	3	;	;	;	;1c1	;	3	26,+
8	SC996284	;	;	;	;	;	;	;	;	;	;1c2	+
9	SC996289	;	;	;	;	3	;	;1c	;	;1c	;1c2	11,26
10	961526-3E15	;	;	;	;3	3;	;	;	;-3	;	;1c	+
11	961176-3A48	;	;	;	;	;	;	;	3	;	;1c1	9,18
12	96229-3A41	;	;	;	;	;	;1	;	;	;	+	++
13	951395-3A31	;	;	;	;	;1c	;	;	;	;	;1c	+
14	B990081	,-3	3	;	3	3	3	;1c2	3	3;	3	10,+
15	B990133	;	;	;	;	;	3	;	3	3	;	9
16	B990399	;	;	;	3	;1c	;	;	3	;	;1c3	+
17	B990816	;	;	;	;	;	3	;	3	3	;	9
18	LA95181BUB40-1	;	;	;	;	;	;	;	3	3	;	2a,9
19	LA96140BUA70-2	;	;	-	-	;	3	;	3	3	;	9
20	LA95135D54-2-3	;	;	;	;	;	;	;	;	3	;	9,24
21	AR 850-1-1	;	;	;1c	;	3	;	;1c	;	;	;1c2	11,26
22	AR 93027-5-1	;	;	3	3	;	;	-	;	3;	;	+
23	FL9547-B15-C1-D3	;	;	;1c2	;	;	;	;	;	;	;-3	+
24	FL95345-A10-C5	;	;	;	;	3	;	;	;	;	;1c2	11,26
25	FL99089-D35	;	3	;	3	3	3	;1c2	3	3	3	10,+
26	D00*6874-9	;	;	;	;	3	;	;1c	3	3	;	11
27	D00*6874-2	;	;	;	;1c	3	;	;1c	3	3	;	11
28	D01-7017	;	3-;	;	3	3	3	3	3	3	;	10,+
29	D01*7759	3-,	3	3-,	3	3	3	3	3	3	3	0
30	VA01W-21	;	;	;	3-;	3	;	;	;	;1c	3	26,+
31	VA02W-513	;	;	;	;	3	;	;	;	;	;1c	11,26
32	VA02W-555	;	;	;	;	3	;	;	;	;	;1c	11,26
33	VA02W-370	;	3;	;	;	3	;	;	3	;	;1c2	18,+
34	981543A1-1-9-3	;	;	;	3	3	;	;	;	;	3;	26,+
35	99751RA1-6-3	;	;	;	;	3	;2	;	;	;	;1c	11,26
36	NC01-27750	;	;	;	;	;	;	;	;	;1c2	;	+
37	NC00-15371	;	;	;	;	;	;	;	3;	3;	;	2a,9,+
38	NC01-28087	;	;	;	;	;3	;	;	;	;	;1c	11,26,+
39	G20412	3	3	3	3	3	3	3	3	3	3	0
40	G20921	-	;	;	3	3	3	3	3	3	3	3
41	G20922	;	3;	;	3	3	-	-	3	3	-	0

* Single genes tested: = 1,2a,2c,3,3Ka,9,10,11,14a,16,17,18,24,26,30,B

** Virulence formula:

BBDB=14a
NBBK=1,2c,10,14a,18
SBDD=1,2a,2c,,14a,17
THBJ=1,2a,2c,3,10, 14a,16,26
MCRK=1,3,3ka,10,11,14a,18,26,30
MLDS=1,3,9,10,14a,17,B
TBBF=1,2a,2c,3,14a,18
TLGJ=1,2a,2c,3,9,10,11,14a
TNRJ=1,2a,2c,3,3ka,9,10,11,14a,24,30
MCDS=1,3,10,14a,17,26,B

*** +=Lr gene(s) present but unable to identify with these Lr virulence combinations

Note: MCRK, MCDS, and TNRJ were the most commonly races identified in the U.S. in 2004.

LEAF RUST

Blacksburg
VA
Griffey

		LR05 TNRJ
1	AGS 2000	;1=
2	USG 3209	;1=
3	Pioneer 26R61	;1=
4	McCormick	3S
5	TN04-01	;12/TR3S
6	NC00-15332	3S/;1
7	MV 5-46	;1
8	SC996284	2;
9	SC996289	2;
10	961526-3E15	0;
11	961176-3A48	;12
12	96229-3A41	0;
13	951395-3A31	0;
14	B990081	;12
15	B990133	23
16	B990399	;1
17	B990816	3S
18	LA95181BUB40-1	23
19	LA96140BUA70-2	3S
20	LA95135D54-2-3	3S
21	AR 850-1-1	3S
22	AR 93027-5-1	3S
23	FL9547-B15-C1-D3	23;
24	FL95345-A10-C5	;1
25	FL99089-D35	23
26	D00*6874-9	3S
27	D00*6874-2	3S
28	D01-7017	23
29	D01*7759	23
30	VA01W-21	;1
31	VA02W-513	0;
32	VA02W-555	0;
33	VA02W-370	;1
34	981543A1-1-9-3	;1
35	99751RA1-6-3	0;
36	NC01-27750	;1
37	NC00-15371	23
38	NC01-28087	0;
39	G20412	3S
40	G20921	3S
41	G20922	3S

	LR gene	LR05 TNRJ
Lr differential	Tc Lr1	3S
Lr differential	Tc Lr2a	23
Lr differential	Tc Lr2c	2C
Lr differential	Tc Lr3a	3S
Lr differential	Tc Lr9	3S
Lr differential	Tc Lr16	12=C
Lr differential	Tc Lr24	3S
Lr differential	Tc Lr26	;1
Lr differential	Tc Lr3ka	3S
Lr differential	Tc Lr11	3S/0
Lr differential	Tc Lr17	;12
Lr differential	Tc Lr30	3S
Lr differential	Tc Lr18	;1
Lr differential	Tc Lr14a	3S
Lr differential	Tc Lr10	3S
Lr differential	Tc LrB	;12

STEM RUST

St. Paul
MN
Yue Jin

		Seedling Reaction					Adult Field Reaction		
		01MN 84A-1-2	74MN 1049	03ND76C	77ND82A	99KS76A-1	Severity	Infection response	winter kill
		TTTT	TPMK	QFCS	RCRS	RKQQ			%
1	AGS 2000	;1	2/S	2-	;1	;1/S			100
2	USG 3209	;12-	1+	0;	1	;			100
3	Pioneer 26R61	2-	2-	1	1	1	0		99
4	McCormick	2-	2-	1+	1	1			100
5	TN04-01	2-	2-	2	1	1-	0		99
6	NC00-15332	1+	2	12	1+	;	0		60
7	MV 5-46	0;1	0;2-	1+	1/S	1+	0		99
8	SC996284	S	0;	;4	;3	;			100
9	SC996289	S	0;	;4	;4	;			100
10	961526-3E15	1	2-	;1+	1	1+			100
11	961176-3A48	S	0;	0;/S	0;/S	0			100
12	96229-3A41	S/12	0?	;	S	0;			100
13	951395-3A31	0	0?	0	0;	0			100
14	B990081	S	S	S	S	S			100
15	B990133	S	S	;	S	S			100
16	B990399	2-	2-	2-	1	1	TR		95
17	B990816	2-	2	1+	1+	1+	0		80
18	LA95181BUB40-1	-	0;12	;	S	;	TS		90
19	LA96140BUA70-2	;12	0;	0	0	0			100
20	LA95135D54-2-3	S	2-	-	-	S			100
21	AR 850-1-1	S	-	2-/S	2+	S	60	S	70
22	AR 93027-5-1	S	2/S	2	S	S	40	S	70
23	FL9547-B15-C1-D3	S	S	0	S	;123			100
24	FL95345-A10-C5	;1	0;	0	0;	0;			100
25	FL99089-D35	S	S	S/2	S low IF	S			100
26	D00*6874-9	S	S	S	S	S	10	MS-S	90
27	D00*6874-2	S	S	S	S	S			100
28	D01-7017	S/2	S	2	S	S/S			100
29	D01*7759	S	2	2-	S	S (1PL)			100
30	VA01W-21	1-/S	-	1	1/3	1			100
31	VA02W-513	S	0;	0	S	S			100
32	VA02W-555	;	0;	0	1+	1			100
33	VA02W-370	S	S	2+	S	S			100
34	981543A1-1-9-3	1	-	;1	;1	;1	0		90
35	99751RA1-6-3	;	-	0	;	;			100
36	NC01-27750	1+	2-	1	1	0;			100
37	NC00-15371	S	S	S	S	S			100
38	NC01-28087	0;1	;1	0	1	0			100
39	G20412	S	2-	-	S	S	30	S	80
40	G20921	1	S	S	S	S	40	S	90
41	G20922	;2	S	S	S	S			80
DATE		1/27/2005	1/27/05	2/28/2005	3/1/2005	3/1/2005			

"/" indicates a mixture of plants, predominant type listed first. "S" indicate susceptible, including infection types 3 or 4.
Bulk of races for field inoculation: MCCF, QFCS, QTHJ, RCRS, RKQQ, TPMK, TTTT.

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STRIPE RUST

		Mt. Vernon WA Chen			
		IT 0-8	%	IT 0-8	%
1	AGS 2000				
2	USG 3209				
3	Pioneer 26R61				
4	McCormick				
5	TN04-01				
6	NC00-15332				
7	MV 5-46				
8	SC996284	8	80	8	100
9	SC996289	8	80	8	100
10	961526-3E15	8	80	8	100
11	961176-3A48	5	40	2	20
12	96229-3A41	5	10	2	2
13	951395-3A31	5	10	2	20
14	B990081	8	60	5	20
15	B990133	8	60	8	70
16	B990399	5	60	2	2
17	B990816	8	100	8	100
18	LA95181BUB40-1	8	80	8	90
19	LA96140BUA70-2	2	10	2	1
20	LA95135D54-2-3	5	10	2	2
21	AR 850-1-1	5	10	2	2
22	AR 93027-5-1	8	60	8	100
23	FL9547-B15-C1-D3	8	40	8	70
24	FL95345-A10-C5	2	10	2	10
25	FL99089-D35	8	80	8	100
26	D00*6874-9	2	10	2	10
27	D00*6874-2	2	10	2	10
28	D01-7017	5	20	8	20
29	D01*7759	5	20	2	10
30	VA01W-21	8	80	8	100
31	VA02W-513	8	60	8	100
32	VA02W-555	2	10	2	5
33	VA02W-370	5	40	5	20
34	981543A1-1-9-3	5	20	2,8	90
35	99751RA1-6-3	8	40	8	90
36	NC01-27750	8	40	8	100
37	NC00-15371	8	80	8	100
38	NC01-28087	8	80	8	100
39	G20412	8	80	8	100
40	G20921	8	80	8	100
41	G20922	8	80	8	100

LOCATION MEANS
GROWTH STAGE / DATE — April 22 - Stem elongation — May 25 - Heading

POWDERY MILDEW

Blacksburg
VA
Griffey

		PM05 Comp
1	AGS 2000	23
2	USG 3209	0
3	Pioneer 26R61	0
4	McCormick	1
5	TN04-01	4
6	NC00-15332	23
7	MV 5-46	2
8	SC996284	23
9	SC996289	3
10	961526-3E15	0/TR4
11	961176-3A48	4
12	96229-3A41	0
13	951395-3A31	0
14	B990081	4
15	B990133	4
16	B990399	3
17	B990816	3
18	LA95181BUB40-1	3
19	LA96140BUA70-2	34
20	LA95135D54-2-3	23
21	AR 850-1-1	4
22	AR 93027-5-1	4
23	FL9547-B15-C1-D3	12
24	FL95345-A10-C5	0
25	FL99089-D35	3
26	D00*6874-9	4
27	D00*6874-2	4
28	D01-7017	4
29	D01*7759	4
30	VA01W-21	12
31	VA02W-513	34
32	VA02W-555	34
33	VA02W-370	34
34	981543A1-1-9-3	01/4
35	99751RA1-6-3	01/TR4
36	NC01-27750	4
37	NC00-15371	4
38	NC01-28087	34
39	G20412	4
40	G20921	4
41	G20922	4

		PM gene	PM05 Comp
Pm differential	Chancellor	Susc	4
Pm differential	Axminster	Pm 1	3
Pm differential	C68-15*7/CI 13836	Pm 1	3
Pm differential	Ulka	Pm 2	4
Pm differential	Asosan	Pm 3a	4
Pm differential	Chul	Pm 3b	1
Pm differential	Sonora*	Pm 3c	4
Pm differential	C68-15*6/Sonora	Pm 3c	4
Pm differential	C68-15*6/Trit	Pm 3c	34
Pm differential	Michigan Amber	Pm 3f	4
Pm differential	Yuma	Pm 4a	4
Pm differential	C68-15*5/Yuma	Pm 4a	4/1
Pm differential	C68-15*5/Kapli	Pm 4a	4/1
Pm differential	Ronos	Pm 4b	4
Pm differential	Hope	Pm 5	34
Pm differential	C747*	Pm 6	4
Pm differential	Transec*	Pm 7	4
Pm differential	C68-15*7/Transec	Pm 7	3
Pm differential	Federation/Kavkaz	Pm 8	12
Pm differential	Amigo	Pm 17	0
Pm differential	C68-15*5//747/Amigo	Pm 17	0

HESSIAN FLY

W. Lafayette
IN
Cambron

		Biotype B	Biotype C	Biotype D	Biotype E	Biotype L
1	AGS 2000	0-16	0-15	0-15	3-11	0-12
2	USG 3209	12-2	0-15	0-16	13-2	0-15
3	Pioneer 26R61	2-12	0-15	0-11	14-0	0-18
4	McCormick	0-16	0-17	0-18	0-13	0-16
5	TN04-01	0-15	0-15	0-16	0-16	0-12
6	NC00-15332	0-18	0-20	0-15	8-5	0-15
7	MV 5-46	0-19	0-16	0-12	0-14	0-16
8	SC996284	13-1	3-11	11-4	14-0	11-5
9	SC996289	16-0	4-14	11-2	14-0	14-4
10	961526-3E15	0-16	0-15	0-15	0-12	0-17
11	961176-3A48	18-0	15-0	16-0	14-0	20-0
12	96229-3A41	16-1	17-0	4-15	13-0	0-20
13	951395-3A31	0-19	0-15	0-15	0-15	0-16
14	B990081	12-3	0-15	0-15	17-0	0-18
15	B990133	14-1	0-15	0-16	16-0	0-17
16	B990399	0-15	0-15	0-15	0-16	0-15
17	B990816	0-17	0-14	0-16	0-11	0-19
18	LA95181BUB40-1	0-15	0-14	0-13	15-0	0-17
19	LA96140BUA70-2	0-18	0-19	0-17	2-14	0-19
20	LA95135D54-2-3	1-12	6-8	0-16	0-16	0-14
21	AR 850-1-1	0-18	0-16	0-16	0-16	0-17
22	AR 93027-5-1	8-8	2-13	1-17	13-2	0-16
23	FL9547-B15-C1-D3	0-14	11-2	0-14	10-5	0-16
24	FL95345-A10-C5	0-14	0-15	0-13	0-17	0-19
25	FL99089-D35	0-17	0-18	0-18	8-9	0-20
26	D00*6874-9	0-19	0-16	0-18	0-18	0-18
27	D00*6874-2	0-17	0-16	0-17	0-16	0-17
28	D01-7017	0-19	0-14	0-17	0-18	0-17
29	D01*7759	12-4	0-17	0-14	15-0	0-20
30	VA01W-21	0-17	0-15	0-18	0-17	0-15
31	VA02W-513	0-16	0-15	0-19	0-12	0-17
32	VA02W-555	0-18	0-14	0-15	0-13	0-18
33	VA02W-370	18-0	14-4	8-5	15-0	0-19
34	981543A1-1-9-3	0-17	2-12	0-20	0-12	0-16
35	99751RA1-6-3	11-3	3-9	4-12	9-0	10-4
36	NC01-27750	0-18	0-16	0-16	0-17	0-20
37	NC00-15371	0-15	0-16	0-15	0-16	0-17
38	NC01-28087	0-15	0-13	0-15	12-0	0-18
39	G20412	10-3	0-16	0-17	13-0	0-14
40	G20921	10-4	0-18	0-16	17-0	0-14
41	G20922	12-2	0-13	0-13	14-0	0-17

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

LAB NO.		Samples composited from Bay AR, Belle Mina AL, Evansville IN, Queenstown MD, Newton MS, Knoxville TN, Warsaw VA	MILLING QUALITY SCORE		BAKING QUALITY SCORE		TEST WT. SCORE		SOFT. EQUIV. SCORE		MICRO T.W. LB/BU
		STANDARD (#2502, USG 3209)	53.2	D	43.0	E	58.3	D	58.3	D	61.1
2501	1	AGS 2000	66.9	C	68.7	C	61.8	C	67.2	C	61.5
2502	2	USG 3209	53.2	D	43.0	E	58.3	D	58.3	D	61.1
2503	3	Pioneer 26R61	53.4	D	52.3	D	71.7	B	55.4	D	62.7
2504	4	McCormick	59.3	D	63.0	C	65.1	C	76.4	B	61.9
2505	5	TN04-01	63.6	C	65.7	C	82.7	A	64.4	C	64.0
2506	6	NC00-15332	40.0	E	66.3	C	48.7	E	67.0	C	59.9
2507	7	MV 5-46	51.8	D	66.0	C	61.8	C	66.2	C	61.5
2508	8	SC996284	56.3	D	60.3	C	71.8	B	77.0	B	62.7
2509	9	SC996289	53.0	D	41.7	E	65.8	C	74.2	B	62.0
2510	10	961526-3E15	51.2	D	62.3	C	62.1	C	69.9	C	61.5
2511	11	961176-3A48	47.6	E	27.7	F	71.9	B	62.8	C	62.7
2512	12	96229-3A41	52.5	D	59.0	D	63.8	C	64.7	C	61.7
2513	13	951395-3A31	64.0	C	48.0	E	65.4	C	58.6	D	61.9
2514	14	B990081	56.8	D	84.7	A	65.6	C	65.5	C	61.9
2515	15	B990133	58.9	D	77.3	B	68.7	C	66.9	C	62.3
2516	16	B990399	66.1	C	73.0	B	76.0	B	61.1	C	63.2
2517	17	B990816	65.8	C	79.0	B	69.5	C	55.0	D	62.4
2518	18	LA95181BUB40-1	56.9	D	81.0	A	52.3	D	83.8	A	60.3
2519	19	LA96140BUA70-2	52.2	D	68.0	C	68.5	C	54.2	D	62.3
2520	20	LA95135D54-2-3	49.9	E	51.0	D	49.1	E	81.4	A	60.0
2521	21	AR 850-1-1	68.4	C	69.0	C	55.7	D	69.2	C	60.7
2522	22	AR 93027-5-1	55.4	D	72.7	B	55.4	D	78.8	B	60.7
2523	23	FL9547-B15-C1-D3	68.0	C	79.7	B	48.8	E	63.5	C	59.9
2524	24	FL95345-A10-C5	53.6	D	52.0	D	72.3	B	54.2	D	62.7
2525	25	FL99089-D35	57.9	D	64.7	C	70.6	B	54.5	D	62.5
2526	26	D00*6874-9	49.2	E	60.3	C	66.5	C	68.7	C	62.0
2527	27	D00*6874-2	49.4	E	47.7	E	68.1	C	64.6	C	62.2
2528	28	D01-7017	45.9	E	55.7	D	53.4	D	65.7	C	60.5
2529	29	D01*7759	59.7	D	60.7	C	57.3	D	76.7	B	60.9
2530	30	VA01W-21	49.7	E	60.7	C	65.4	C	64.9	C	61.9
2531	31	VA02W-513	48.4	E	49.0	E	66.4	C	57.3	D	62.0
2532	32	VA02W-555	53.3	D	65.7	C	56.1	D	59.4	D	60.8
2533	33	VA02W-370	50.8	D	50.7	D	70.2	B	61.4	C	62.5
2534	34	981543A1-1-9-3	53.6	D	46.3	E	68.3	C	62.1	C	62.3
2535	35	99751RA1-6-3	40.1	E	44.0	E	50.4	D	64.2	C	60.1
2536	36	NC01-27750	54.1	D	58.3	D	50.7	D	61.4	C	60.1
2537	37	NC00-15371	58.2	D	67.0	C	62.7	C	57.1	D	61.6
2538	38	NC01-28087	48.9	E	89.7	A	53.5	D	75.5	B	60.5
2539	39	G20412	51.3	D	65.7	C	51.7	D	66.3	C	60.3
2540	40	G20921	43.7	E	34.3	F	67.8	C	53.9	D	62.2
2541	41	G20922	41.0	E	53.3	D	66.4	C	49.9	E	62.0

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ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

LAB NO.		Samples composited from Bay AR, Belle Mina AL, Evansville IN, Queenstown MD, Newton MS, Knoxville TN, Warsaw VA	FLOUR YIELD %		SOFT. EQUIV. %	FLOUR PROT. %		LACTIC ACID RET'N	COOKIE DIAM. CM.		TOP GR.
		STANDARD (#2502, USG 3209)	69.7		56.9	7.97		116.3	17.05		3
2501	1	AGS 2000	72.4		60.0	8.52		110.8	17.82		5
2502	2	USG 3209	69.7		56.9	7.97		116.3	17.05		3
2503	3	Pioneer 26R61	69.7		55.9	8.97	*	117.0	17.33		4
2504	4	McCormick	70.9		63.2	8.43		123.9	17.65		4
2505	5	TN04-01	71.7		59.0	9.22	*	106.1	17.73		4
2506	6	NC00-15332	67.0	Q	60.0	7.84		109.0	17.75		4
2507	7	MV 5-46	69.4		59.7	8.35		106.9	17.74		3
2508	8	SC996284	70.3		63.4	8.42		134.4	17.57		4
2509	9	SC996289	69.6		62.5	8.45		137.0	17.01		2
2510	10	961526-3E15	69.3		61.0	8.38		118.7	17.63		3
2511	11	961176-3A48	68.5	*	58.5	8.48		136.7	16.59	Q	1
2512	12	96229-3A41	69.5		59.2	8.39		133.7	17.53		4
2513	13	951395-3A31	71.8		57.0	8.20		106.0	17.20		3
2514	14	B990081	70.4		59.4	8.15		138.2	18.30		4
2515	15	B990133	70.8		59.9	8.67	*	140.5	18.08		4
2516	16	B990399	72.2		57.9	7.92		109.7	17.95		4
2517	17	B990816	72.2		55.8	8.12		118.0	18.13		5
2518	18	LA95181BUB40-1	70.4		65.8	7.15		119.6	18.19		4
2519	19	LA96140BUA70-2	69.5		55.5	9.01	*	117.6	17.80		4
2520	20	LA95135D54-2-3	69.0		65.0	7.89		123.5	17.29		3
2521	21	AR 850-1-1	72.7		60.7	8.05		127.2	17.83		4
2522	22	AR 93027-5-1	70.1		64.1	7.93		123.9	17.94		4
2523	23	FL9547-B15-C1-D3	72.6		58.7	8.10		135.4	18.15		3
2524	24	FL95345-A10-C5	69.7		55.5	8.91	*	116.7	17.32		2
2525	25	FL99089-D35	70.6		55.6	8.89	*	119.2	17.70		4
2526	26	D00*6874-9	68.9	*	60.5	8.47		115.0	17.57		3
2527	27	D00*6874-2	68.9	*	59.1	8.78	*	119.4	17.19		2
2528	28	D01-7017	68.2	*	59.5	8.40		139.9	17.43		3
2529	29	D01*7759	71.0		63.4	8.41		149.0	17.58		3
2530	30	VA01W-21	69.0		59.2	7.93		110.1	17.58		3
2531	31	VA02W-513	68.7	*	56.6	8.64	*	125.4	17.23		3
2532	32	VA02W-555	69.7		57.3	8.35		114.2	17.73		3
2533	33	VA02W-370	69.2		58.0	8.14		123.4	17.28		3
2534	34	981543A1-1-9-3	69.7		58.2	9.15	*	115.4	17.15		2
2535	35	99751RA1-6-3	67.0	Q	59.0	8.84	*	119.6	17.08		2
2536	36	NC01-27750	69.8		58.0	8.36		111.3	17.51		2
2537	37	NC00-15371	70.6		56.5	8.77	*	124.1	17.77		3
2538	38	NC01-28087	68.8	*	62.9	8.16		91.5	18.45		4
2539	39	G20412	69.3		59.7	8.47		117.3	17.73		5
2540	40	G20921	67.8	Q	55.4	8.45		135.1	16.79	*	1
2541	41	G20922	67.2	Q	54.0	9.08	*	133.5	17.36		2

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

Application is required in order to determine if a plant variety protection certificate is to be issued *(7 U.S.C. 2421)*. The information is held confidential until the certificate is issued *(7 U.S.C. 2426)*.

1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
University of Georgia Research Foundation, Inc.	GA951395-3A31	AGS 2031
4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP, and Country)*	**5. TELEPHONE** *(Include area code)*	**6. FAX** *(Include area code)*
627 Boyd Graduate Studies Research Center Athens, GA 30602-7411	(706) 542-1404	(706) 542-3837
	7. PVPO NUMBER	#200800006

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. **If no, please explain.** ☑ **YES** ☐ **NO**

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? **If no, give name of country.** ☑ **YES** ☐ **NO**

10. Is the applicant the original owner? ☐ **YES** ☑ **NO** **If no, please answer <u>one</u> of the following:**

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?
☑ **YES** ☐ **NO** **If no, give name of country**

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?
☐ **YES** ☐ **NO** **If no, give name of country**

11. Additional explanation on ownership *(Trace ownership from original breeder to current owner. Use the reverse for extra space if needed)*:

SEE ATTACHED.

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

EXHIBIT E
UNIVERSITY OF GEORGIA RESEARCH FOUNDATION, INC.
APPLICATION FOR 951395-3A31
ADDITIONAL EXPLANATION OF OWNERSHIP

The variety for which plant variety protection is hereby sought was developed by Jerry Johnson and G. David Buntin employees at The University of Georgia Agricultural Experiment Stations. The Georgia Agricultural Experiment Stations are a part of The University of Georgia. The University of Georgia is one of the universities of The University System of Georgia. The Board of Regents of the University System of Georgia ("Board of Regents") is a body that was created by the Constitution of the State of Georgia. The University of Georgia Research Foundation, Inc. is a Georgia nonprofit corporation. It was incorporated, among other things, to own and exploit intellectual property developed or created at The University of Georgia. On June 9, 1982 the Board of Regents approved a Patent Policy regarding inventions and discoveries by persons employed at The University of Georgia. As an employee at The University of Georgia Agricultural Experiment Stations, Jerry Johnson and G. David Buntin is subject to said Patent Policy. Rights in novel plant varieties developed at The University of Georgia, including 951395-3A31 are covered by said Patent Policy. By agreement, the Board of Regents assigned to The University of Georgia Research Foundation, Inc. all rights in intellectual property covered by said Patent Policy. This agreement applies to then existing intellectual property and to intellectual property which was developed thereafter.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

EXHIBIT F
DECLARATION REGARDING DEPOSIT

NAME OF OWNER (S)	ADDRESS *(Street and No. or RD No., City, State, and Zip Code and Country)*	TEMPORARY OR EXPERIMENTAL DESIGNATION
University of Georgia Research Foundation, Inc.	627 Boyd Graduate Studies Research Center Athens, GA 30602-7411	GA951395-3A31
		VARIETY NAME AGS 2031
NAME OF OWNER REPRESENTATIVE (S)	**ADDRESS** *(Street and No. or RD No., City, State, and Zip Code and Country)*	FOR OFFICIAL USE ONLY
Alisa Harkins Sohail Malik	627 Boyd Graduate Studies Research Center Athens, GA 30602-7411	**PVPO NUMBER** #200800006

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.

Signature

11 OCT 2007
Date

2/0